# Chapter 7.
# Conclusions and Recommendations

## Conclusions

### Building Envelope

The Building Envelope, a 0.4-acre (0.16-ha) plot at the northern end of Predevelopment, Ltd. property appears typical of the remainder of Long Point and much of Kelleys Island, in that it may have been a place where the shallow bedrock and abundant glacial pebbles and cobbles gave it utility as a source area for tool-making materials for prehistoric peoples. The presence of exploratory fragments, and the lack of finished or partially completed tools, indicates casual visits to the site, but no evidence of a more permanent type of occupation was found.

Thus, the utilization of this relatively small area of land for a seasonal lodge will not result in the loss of any significant cultural resources. It is also important to point out that the remaining 6.1 acres (2.5 ha) in the tract of land owned by Predevelopment, Ltd. falls within the zone where building construction is prohibited on Kelleys Island. It is the stated intent of the owners to maintain this land in its natural condition. The specific actions to accomplish this are presented in the Habitat Conservation Plan prepared in conjunction with the U.S. Fish and Wildlife Service.

The Lincoln House foundation and cisterns and the Lincoln Stone Wall are far removed from proposed construction activities. As well as significant historic features they serve as habitat for the Lake Erie watersnake. As such, these sites are protected from disturbance during project construction and likewise for future uses of the property. Therefore, it is concluded that no historic properties will be affected by construction of the seasonal lodge.

### Boat Docking Facility

Based on investigations by the Ohio Department of Natural Resources (Hartley and Verber 1960) and the U.S. Army Corps of Engineers (Wilson and Hudson 1963), wind and associated wave storms are significantly ameliorated by the sheltered nature of Kelleys Island's North Bay and the barriers presented to waves by the North Shore headland and Long Point. These studies concluded that weather severe enough to limit recreational boating in the vicinity of the proposed boat docking facility will occur about 12 days per year and that waves greater than 3 ft in height will have a duration of approximately 132 hours per year. Wave refraction due to the shallow nature of North Bay significantly diminishes the height of the incoming waves, making this bay a favorable location for recreational watercraft.

An analysis of wave diffraction, refraction, and reflection anticipated for the proposed docking facility revealed no negative effect of this structure on the submerged cultural resources south of the structure, namely the shipwrecks of the steambarge *ADVENTURE* and the scow schooner *W. R. HANNA*. Northeasterly storm waves which currently are potentially damaging to these shipwrecks, will be diffracted by the docking facility to form a protective "shadow zone" in the vicinity of the shipwrecks. Thus, from the standpoint of lake processes, the proposed docking facility is not expected to produce any adverse effects on submerged cultural resources.

## Recommendations

As stated in the Habitat Conservation Plan, Predevelopment, Ltd. is committed to retaining as much natural environment on Long Point as possible. The long-term fulfillment of this commitment can be ensured by a number of initiatives, including: (1) placing development restrictions on the property's deed, (2) establishing a conservation easement, selling, or donating land to a conservation organization, or (3) formulating a joint management relationship with a conservation organization having holdings on Kelleys Island (e.g. Cleveland Museum of Natural History).

During the construction phase of the Predevelopment, Ltd. Project, particularly excavating for the lodge's footers or foundation, installation of the water supply and sewage treatment systems, and placement of the access drive and utilities, attention should be paid to guidelines established by the U.S. Fish and Wildlife Service to preclude the taking of any

endangered species. Attention should also be given to the potential for unearthing prehistoric artifacts, and possibly historic artifacts from the Lincoln and Watkins families. If such materials are recovered, their provenience should be documented and they should be preserved for description as an addendum to this investigation. The same recommendation is true for the shore construction work on the proposed boat docking facility. If any significant submerged cultural resources are encountered in Lake Erie during construction of the docking facility, the Ohio Historic Preservation Office should be contacted immediately for advice and direction on how to handle the situation.

Because portions of the Lincoln Stone Wall and the Lincoln House foundation and cistern are adjacent to the existing private access drive (Long Point Lane) there is a potential risk of damage to these historic sites from the movement of construction equipment and materials to and from the Building Envelope and the shore connections of the boat dock facility. To minimize these risks, it is recommended that the perimeter of the Lincoln House foundation and cistern be cordoned off with yellow caution ribbon during the construction period. The same procedure should be followed for those portions of the Lincoln Stone Wall which are near the access road and those portions in close proximity to the boat docking facility.

As stated earlier in this report, a tightly spaced, and preferably lighted, set of buoys marking the entrance channel to the docking facility would minimize potential conflict between shipwreck divers and boaters wishing to enter or depart the docking facility. An additional recommendation is to place mooring buoys on the shipwrecks themselves to help focus diving activities on the wrecks and keep divers clear of the navigational channel. Mooring buoys with information placards would also have three additional benefits: (1) they would mark the wrecks so that they could be easily located and identified, (2) they would provide a place for tending vessels to tie so they would not drift into the navigation channel or have to anchor which might damage the wrecks, and (3) they would enhance diver safety by providing a guide line leading from the mooring buoy to the shipwreck.

Predevelopment, Ltd.'s construction of the semi-private dock is intended to assist property owners in the adjoining Long Point Subdivision by providing the opportunity to participate in an agreement of common usage and/or dockominium ownership. Dockage for up to 7 vessels is planned for this purpose, equal to the number of lots in the subdivision. This relationship has the potential for eliminating the need for additional docking facilities on Long Point. The modest size of the docking facility also ensures that the number of vessels using the facility is small, thereby reducing potential conflicts with other lake users. Additional recommendations related to the construction and operation of the boat docking facility are contained in the preceding chapter. Adherence to measures such as these will minimize the risk of disturbance to an acceptable level, provide adequate safety measures for both boaters and divers, and permit the boat docking facility to serve the intended purpose without constraining the enjoyment of the lake's cultural resources.

In summary, analyses of potential effects of the proposed seasonal lodge and boat docking facility at Long Point on Kelleys Island have shown that the Predevelopment, Ltd. Project will have minimal impacts on the natural environment and negligible effects to the cultural resources of the project property and adjoining waters of Lake Erie. In specific ways, as specified in the Habitat Conservation Plan filed with the U.S. Fish and Wildlife Service, the project will provide additional wildlife habitat which will enhance protection for historic sites. This assessment finds no rationale for denial of the project and recommends approval.